SAN DIEGO COUNTY WATERFRONT PARK

Setting a Poor Example of Water Use

SUMMARY

After 17 years of planning and construction, at a cost of approximately \$50 million, the San Diego County Waterfront Park (located at the County Administration Center) opened in May 2014. The Waterfront Park is a beautiful addition to the area and widely used since its inception. It is also, however, a highly visible use of potable water.

The 2016/2017 San Diego County Grand Jury (Grand Jury) investigated why the Waterfront Park was not included in the 2015 County drought-management plans. The Waterfront Park lawns received a waiver from the City of San Diego mandatory watering restrictions. The County designated the fountains and associated reflecting pools as "recreational," which exempted them from conservation mandates.

During a time of drought, when water restrictions are limiting how people can use water at their homes, the County is obliged to manage all potable water uses as efficiently as possible and set an example for the public. The Grand Jury found the County does not have a water conservation plan for the Waterfront Park when a water emergency is declared and recommends such a plan be developed. The Grand Jury also found that there are a number of ongoing water conservation measures that can be taken at the Waterfront Park and recommends additional efforts to reduce water consumption while retaining the opportunities for public use and enjoyment.

The Grand Jury recognizes and commends the County for their efforts to generally conserve water. In 2015, countywide actions resulted in 101 million gallons of potable water savings (more than 25 percent) since the reference year of 2013. Water savings continue in 2016 at the same rate.

INTRODUCTION

In response to a complaint, the Grand Jury investigated the alleged excessive water usage at the Waterfront Park, even though conservation mandates had been required by the State, County, and City.

PROCEDURE

The Grand Jury explored management plans, meeting minutes, and conducted interviews to gather water-use data and conservation activities at the Waterfront Park.

- The Grand Jury gathered data about the drought-management plans and programs within both the County and City.
- The Grand Jury reviewed the County Board of Supervisors meeting, May 12, 2015, Agenda Item 9, Drought Response. This document provided much of the background material for this report.
- The Grand Jury visited the Waterfront Park and Fountain Pump Facility.
- The Grand Jury interviewed County and City administration officials.

DISCUSSION

In May 2014, the County opened the Waterfront Park at the County Administration Center (CAC). Initially conceived in 1998 as part of the North Embarcadero Visionary Plan for the western waterfront, the Waterfront Park has been designed to satisfy the present and future needs of all County residents as well as visitors.

In April 2015, Governor Brown issued Executive Order B-29-15 (EO) in response to the severe drought conditions in the state. The EO called for a statewide 25 percent reduction in potable urban water usage through February 2016 as compared to the baseline year of 2013. Following the EO, the State Water Resources Control Board (SWRCB) issued regulations for statewide urban water conservation in May 2015 (Resolution No. 2015-0032).

Following the issuance of the EO, and in anticipation of the regulations expected to be imposed by the SWRCB, the County staff reduced irrigation at nearly all facilities. The County prepared and funded a Drought Response Action Plan in May 2015. Approximately \$13 million was appropriated to implement extensive water conservation activities at all County-maintained landscapes, facilities, and parks. These activities were applied to all sites with the exception of some critical recreational facilities such as the Waterfront Park. The Waterfront Park continued to use water at a higher rate since it provided a valuable gathering and recreation space for the community at a time when most residents were dealing with water restrictions. Additionally, all County-owned decorative fountains were turned off and drained as required. The Waterfront Park fountains remained in operation because they were designated as "recreational fountains" and not subject to the SWRCB decorative-fountain restrictions.

In June 2016, the mandated State of California water conservation efforts were rolled back. Conservation continued, however, at a slower pace, and in some cases water usage reverted to the pre-2015 levels. As the State faces the prospect of its sixth straight year of drought, it is anticipated the SWRCB will establish permanent requirements for water-use efficiency and water budgets for selected water districts to be phased-in during 2017. Particular focus will be on landscaping. ^{2,3}

Some actions have been taken by the County to reduce the initial water use at the Waterfront Park. It, however, still consumes copious amounts of potable water. The City of San Diego Public Utilities Department granted potable water use waivers in response to County requests. This allowed watering as necessary to preserve the integrity and lushness of the Waterfront Park lawns. (The CAC is not near any reclaimed water sources.) Since the opening of the Waterfront Park through June 2016, irrigation has consumed 17 million gallons of potable water (see Table 1).

¹ San Diego County Board of Supervisors Meeting Agenda, http://bosagenda.sdcounty.ca.gov/agendadocs/doc?id=0901127e80207390

² Associated Press, "Sharp Increase in State Water Use Seen," San Diego Union-Tribune, October 6, 2016.

³ Joshua Emerson Smith, "State Eyes New Water Rules as Users Cut Back Less," *San Diego Union-Tribune*, October 16, 2016.

	J	F	M	A	M	J	J	A	S	О	N	D	Total
2014			213	1239	1641	1014	1043	902	896	684	282	290	8204
2015	40	221	546	787	153	542	672	665	433	583	559	85	5286
2016	138	402	606	628	852	1026							3652
													17142

Table 1. CAC Irrigation Water Use (rounded to thousands of gallons)

The County declared the fountains and reflecting pools in the Waterfront Park as recreational as allowed by the SWRCB and City regulations. The term *recreational* refers to any structure that is open to the general public and uses recirculated water to which people can come into contact. The County uses this definition to justify operation of all 31 fountains within the Waterfront Park. Although the County has reduced the summer and winter operating hours of the fountains, there is no effort to actively manage the fountain operation when there is little or no use for recreational purposes. Active management would entail observation of public use throughout the day and adapting fountains operations accordingly. The County does not know the actual fountain water consumption because the fountain system and the central plant (CAC air conditioning) share the water from the City meter. Since the opening of the Waterfront Park through June 2016, potable water consumption for fountains and the central plant has been 10 million gallons (see Table 2).

	J	F	M	A	M	J	J	A	S	О	N	D	Total
2014				6	1094	450	515	583	459	722	205	427	4461
2015	184	282	426	339	229	390	388	409	327	306	187	115	3582
2016	132	188	482	355	314	483							1954
													9997

Table 2. CAC Central Plant and Fountain System Water Use (rounded to thousands of gallons)

While the Grand Jury is concerned with the wasteful use of potable water at the Waterfront Park, the Grand Jury does not want to diminish the County efforts at water conservation. In fact, the Grand Jury wishes to commend the County administration for their active water conservation measures elsewhere throughout the County. The water savings are impressive. As illustrated in Figure 1, using 2013 as a reference, potable water savings by the County in 2015 was 101 million gallons (over 25 percent). This is enough to provide potable water to 600 households for one year. The savings continue in 2016 at the same rate.

⁴ Fountains Definition, http://www.sandiego.gov/water/conservation/drought/fountains (accessed September 2016).

⁵ San Diego County Water Authority estimates one acre foot of water serves two households per year. There are 325,281 gallons of water per acre foot.

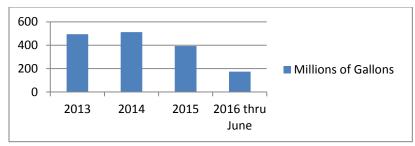


Figure 1. County Potable Water Consumption

The Grand Jury recognizes the County has taken efforts to reduce water consumption at the Waterfront Park. The County has replaced the original water filters for the treated fountain water with a more efficient, reliable, and less water-intensive filtration system. The hours of operation of the fountains have been reduced and are now 11 hours per day in the summer months and eight hours per day for the rest of the year.

The County should recognize it is projecting a water-wasteful image to its citizens. There are a number of water conservation actions at the Waterfront Park that should be considered.

- Convert low-use lawn area to drought-tolerant plantings similar to other areas around the CAC.
- Control the evaporation rates of the fountains and associated reflecting pools by managing the operating modes (see footnote 1).
- Actively manage the fountains based on public recreational demand. The Grand Jury suggests the following modes.
 - o High recreational all fountains.
 - o Low recreational north or south banks only.
 - Special event non-recreational north or south or both or neither based on the event.
 - Ornamental only limited time in normal circumstances, non-operational during declared water emergencies that require ornamental fountains to be off and drained.

FACTS AND FINDINGS

Fact: In April 2015 the State of California mandated 25 percent reduction in potable water use.

Fact: The County Drought Response Action Plan was approved in May 2015.

Fact: In response to State of California mandates, the County developed extensive drought management and water conservation plans which achieved over 25 percent savings in potable water consumption.

Fact: The Waterfront Park was not included in the County Drought Response Action Plan.

Fact: Potable water-use waivers were received from the City to allow as-needed watering to maintain green Waterfront Park lawns.

Fact: The County designated the Waterfront Park fountains as recreational without water-use restrictions, as allowed by the SWRCB and the City.

Fact: When the fountains are not being used for recreational purposes, they are not designated ornamental, which during a declared water emergency would require them to be turned off and drained.

Finding 01: In the event of a declared water emergency, the County has no formal water-conservation plan for the Waterfront Park.

Fact: The County has reduced the daily water consumption of the fountains and associated reflecting pools by reducing the fountain operating hours.

Fact: The County has replaced the original filters for the treated fountain water with a more efficient, reliable, and less water-intensive filtration system.

Fact: There are additional potable water conservation measures (low-use lawn conversion and fountain system management) that can be employed at the Waterfront Park.

Finding 02: The County has not maximized its potable water conservation opportunities at the Waterfront Park.

Fact: Total CAC water consumption for the fountains and central plant since May 2014 is 10 million gallons of potable water.

Fact: Fountain-only water consumption is not measured.

Finding 03: Insufficient data is available to accurately measure and manage fountain water conservation.

RECOMMENDATIONS

The 2016/2017 San Diego County Grand Jury recommends that the Chief Administrative Officer for the County of San Diego:

17-04: Prepare an emergency drought-response plan for the Waterfront Park

that reduces the current recreational operating hours of the fountain system and turns off the fountains when not in use for recreation (ornamental mode). The plan should be invoked at any time the City Department of Public Works declares a water emergency that restricts residential water consumption and ornamental fountain operation.

17-05: Implement a proactive, ongoing water-conservation program for the

Waterfront Park that reduces potable water consumption through landscape alternatives and active fountain-operation management.

17-06: Develop a means to measure fountain water consumption at the Waterfront Park allowing water usage conservation actions to be tracked.

17-07: Develop for the Waterfront Park a public recreational usage profile of the fountain system to allow plans to be established during declared water emergencies and for normal conservation.

REQUIREMENTS AND INSTRUCTIONS

The California Penal Code §933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an <u>elected County official</u> (e.g. District Attorney, Sheriff, etc.), such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code §933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

- (a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
 - (1) The respondent agrees with the finding
 - (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.
- (b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:
 - (1) The recommendation has been implemented, with a summary regarding the implemented action.
 - (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
 - (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
 - (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.
- (c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some

decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code §933.05 are required from the:

Responding Agency	Recommendations	<u> Date</u>
Chief Administrative Officer	17-04 through 17-07	May 1, 2017
County of San Diego		